

1. A liquid gelling agent concentrate comprising:
 - an environmentally safe hydrocarbon carrier liquid;
 - an organophillic clay suspending agent;
 - a surfactant for dispersing said organophillic clay suspending agent in said carrier liquid; and
 - a particulate aqueous fluid gelling agent suspended in said carrier liquid.
2. The gelling agent concentrate of claim 1 wherein said environmentally safe hydrocarbon carrier liquid is selected from the group consisting of a mixture of hydrocarbons having in the range of from about 6 to about 13 carbon atoms obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst, a mixture of hydrocarbons having in the range of from about 10 to about 25 carbon atoms obtained by catalytic hydrogenation of vacuum gas oils followed with dewaxing by hydroisomerization and stabilization by hydrotreating at high pressures, a mixture of severely hydrocracked low toxicity mineral oils and synthetic isoalkanes, polyalpha olefins, mixtures of C₁₀-C₁₄ alkanes and C₈ and higher alkenes, mixtures of linear alpha and internal olefins, hydrocarbon blends containing 93% linear paraffins, blends of isoalkanes and isoalkenes and alcohols, blends of linear internal olefins having from about 16 to about 18 carbon atoms, blends of linear alpha-olefins having 10 or more carbon atoms, vegetable oils, and vegetable esters.
3. The gelling agent concentrate of claim 1 wherein said environmentally safe

hydrocarbon carrier liquid is a mixture of hydrocarbons having in the range of from about 6 to about 13 carbon atoms obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst.

4. The gelling agent concentrate of claim 1 wherein said environmentally safe hydrocarbon carrier liquid has a flash point above about 175°F and a pour point below about -49°F.

5. The gelling agent concentrate of claim 1 wherein said environmentally safe hydrocarbon carrier liquid is present in said concentrate in an amount in the range of from about 25% to about 55% by weight thereof.

6. The gelling agent concentrate of claim 1 wherein said organophillic clay suspending agent is selected from the group consisting of quaternary ammonium bentonite clay, quaternary ammonium montmorillinite clay and quaternary ammonium hectorite clay.

7. The gelling agent concentrate of claim 6 wherein two of the quaternary ammonium substituents of the organophillic clay suspending agent are alkyl radicals having in the range of from 1 to 10 carbon atoms and two of the substituents are alkyl radicals having in the range of from 10 to 30 carbon atoms.

8. The gelling agent concentrate of claim 1 wherein said organophillic clay suspending agent is quaternary ammonium bentonite clay.

9. The gelling agent concentrate of claim 1 wherein said organophillic clay suspending agent is present in said concentrate in an amount in the range of from about 0.2% to about 4% by weight thereof.

10. The gelling agent concentrate of claim 1 wherein said surfactant for dispersing said organophillic clay suspending agent in said carrier liquid is selected from the group consisting of amphoteric surfactants, anionic surfactants, cationic surfactants and nonionic surfactants.

11. The gelling agent concentrate of claim 1 wherein said surfactant for dispersing said organophillic clay suspending agent in said carrier liquid is selected from the group consisting of nonionic esters, polyethylene glycol esters, ethoxylated acids, ethoxylated oils, sorbitol esters, ethoxylated sorbitol esters, ethoxylated alcohols, alcohol alkoxylates, alkanolamides, quaternary ammonium compounds, dialkyl quaternary ammonium compounds, benzyl quaternary ammonium compounds, amine oxides, ethoxylated amines, fatty imidazolines, ether carboxylates, sulfonates, sulfosuccinates, fatty acid taurates, ether carboxylates, alkyl betaines, and alkyl amidopropyl betaines.

12. The gelling agent concentrate of claim 1 wherein said surfactant for dispersing said organophillic clay suspending agent in said carrier liquid is an ethoxylated alcohol.

13. The gelling agent concentrate of claim 1 wherein said surfactant for dispersing said organophillic clay suspending agent in said carrier liquid is present in said concentrate in an amount in the range of from about 0.1% to about 2% by weight thereof.

14. The gelling agent concentrate of claim 1 wherein said particulate aqueous fluid gelling agent is selected from the group consisting of guar, hydroxypropylguar, carboxymethylhydroxypropylguar, hydroxyethylcellulose, carboxymethylhydroxyethylcellulose, carboxymethylcellulose, xanthan and succinoglycan.

15. The gelling agent concentrate of claim 1 wherein said particulate aqueous fluid gelling agent is guar.

16. The gelling agent concentrate of claim 1 wherein said particulate aqueous fluid gelling agent is present in said concentrate in an amount in the range of from about 25% to about 55% by weight thereof.

17. A method of treating a subterranean zone penetrated by a well bore using a viscous aqueous treating fluid comprising the steps of:

(a) mixing a liquid gelling agent concentrate with an aqueous fluid to thereby form a viscous aqueous treating fluid, said liquid gelling agent concentrate comprising an environmentally safe hydrocarbon carrier liquid, an organophillic clay suspending agent, a surfactant for dispersing said organophillic clay suspending agent in said carrier liquid and a particulate aqueous fluid gelling agent suspended in said carrier liquid; and

(b) introducing said viscous aqueous treating fluid into said subterranean zone.

18. The method of claim 17 wherein said formed viscous aqueous treating fluid is a fracturing fluid or a gravel packing carrier fluid.

19. The method of claim 17 wherein said environmentally safe hydrocarbon carrier liquid is selected from the group consisting of a mixture of hydrocarbons having in the range of from about 6 to about 13 carbon atoms obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst, a mixture of hydrocarbons having in the range of from about 10 to about 25 carbon atoms obtained by catalytic hydrogenation of vacuum gas oils followed with

dewaxing by hydroisomerization and stabilization by hydrotreating at high pressures, a mixture of severely hydrocracked low toxicity mineral oils and synthetic isoalkanes, polyalpha olefins, mixtures of C₁₀-C₁₄ alkanes and C₈ and higher alkenes, mixtures of linear alpha and internal olefins, hydrocarbon blends containing 93% linear paraffins, blends of isoalkanes, isoalkenes and alcohols, blends of linear internal olefins having from about 16 to about 18 carbon atoms, blends of linear alpha-olefins having 10 or more carbon atoms, vegetable oils, and vegetable esters.

20. The method of claim 17 wherein said environmentally safe hydrocarbon carrier liquid is a mixture of hydrocarbons having in the range of from about 6 to 13 carbon atoms obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst.

21. The method of claim 17 wherein said environmentally safe hydrocarbon carrier liquid has a flash point above about 175°F and a pour point below about -49°F.

22. The method of claim 17 wherein said environmentally safe hydrocarbon carrier liquid is present in said concentrate in an amount in the range of from about 25% to about 55% by weight thereof.

23. The method of claim 17 wherein said organophillic clay suspending agent is selected from the group consisting of quaternary ammonium bentonite clay, quaternary ammonium montmorillonite clay and quaternary ammonium hectorite clay.

24. The method of claim 23 wherein two of the quaternary ammonium substituents of the organophillic clay are alkyl radicals having in the range of from 1 to 10 carbon atoms and two of the organic substituents are alkyl radicals having in the range of from 10 to 30 carbon atoms.

25. The method of claim 17 wherein said organophillic clay suspending agent is quaternary ammonium bentonite clay.

26. The method of claim 17 wherein said organophillic clay suspending agent is present in said concentrate in an amount in the range of from about 0.2% to about 4% by weight thereof.

27. The method of claim 17 wherein said surfactant for dispersing said organophillic clay suspending agent in said carrier liquid is selected from the group consisting of amphoteric surfactants, anionic surfactants, cationic surfactants and nonionic surfactants.

28. The method of claim 17 wherein said surfactant for dispersing said organophillic clay suspending agent in said carrier liquid is selected from the group consisting of nonionic esters, polyethylene glycol esters, ethoxylated acids, ethoxylated oils, sorbitol esters, ethoxylated sorbitol esters, ethoxylated alcohols, alcohol alkoxylates, alkanolamides, quaternary ammonium compounds, dialkyl quaternary ammonium compounds, benzyl quaternary ammonium compounds, amine oxides, ethoxylated amines, fatty imidazolines, ether carboxylates, sulfonates, sulfosuccinates, fatty acid taurates, ether carboxylates, alkyl betaines, and alkyl amidopropyl betaines.

29. The method of claim 17 wherein said surfactant for dispersing said organophillic clay suspending agent in said carrier liquid is an ethoxylated alcohol.

30. The method of claim 17 wherein said surfactant for dispersing said organophillic clay suspending agent in said carrier liquid is present in said concentrate in an amount in the range of from about 0.1% to about 2% by weight thereof.

31. The method of claim 17 wherein said particulate aqueous fluid gelling agent is selected from the group consisting of guar, hydroxypropylguar, carboxymethylhydroxypropylguar, hydroxyethylcellulose, carboxymethylhydroxyethylcellulose, carboxymethylcellulose, xanthan and succinoglycan.

32. The method of claim 17 wherein said particulate aqueous fluid gelling agent is guar.

33. The method of claim 20 wherein said particulate aqueous fluid gelling agent is present in said concentrate in an amount in the range of from about 25% to about 55% by weight thereof.